

Work Order ID 134557

Wednesday, July 08, 2015 3:19:59 PM

134557

Page 1

Item ID: D3849-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Plate

Stop

NS2

Start Date: 7/06/15 Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/07/15 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: MLS Date: JUL 10 2015 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3849

E

100

0.00

100

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg D3849

Dwg Rev: EProg Rev: E

2-Deburr if necessary

0.02

(4)

0215/08/14

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

(4)

0215/08/14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

DQA: _____ Date: _____



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Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 134557

Wednesday, July 08, 2015 3:19:59 PM

134557

Page 3

Item ID: D3849-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Plate
Start Date: 7/06/15 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 7/07/15 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	Identify as per dwg & Stock Location: <u>WA002</u>	0.00				<u>4</u>			<u>15-08-20</u>
220									
Packaging	Memo	0.00							
Packaging	LOCATION: WA001								<u>ML</u>
230	QC21- Final Inspection - Work Order Release	0.00							
230						<u>ML5</u>		<u>AUG 2 1 2015</u>	
QC	Memo	0.01							
Quality Control									

ML5 AUG 2 0 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, July 08, 2015 3:19:59 PM

Page 1

Work Order ID: 134557

134557

Parent Item: D3849-1

D3849-1

Parent Item Name: Plate

Start Date: 7/06/15

Required Date: 7/07/15

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 12-08-23 JLM VERIFIED BY:DD IPP
Rev:B 12.09.11 AS PER DWG REV.D DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S18GA		Purchased	No			100	sf	300.7776	3.585	15.09474			

M304S18GA

304/316 .050 Sheet

0215/08/14

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT	143.9	
M131700	143.9	
MAT020	156.8776	
M128254	17.4387	
M128435	25	
M128864	31.5964	
M129530	34.3667	
M130923	28.0424	
M131384	20.4334	

132797

1328 15

DQA: _____ Date: _____



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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

DART AEROSPACE LTD		Work Order: 134557
Description: Wearplate		Part Number: D3849-1
Inspection Dwg: D3849	Rev: D	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.375	+0.006/-0.001	Ø.374	/		Vicor-2	
0.125	+/-0.010	.123	/			
0.88	+/-0.030	.875	/			
2.433	+/-0.010	2.438	/			
6.642	+/-0.010	6.640	/			
2.45	+/-0.030	2.45	/			
18.000	+/-0.010	18.000	/			
36.000	+/-0.010	36.000	/			
51.313	+/-0.010	51.313	/			
7.00	+/-0.030	7.00	/			
41.50	+/-0.030	41.50	/			
7.72	+/-0.030	7.712	/			
54.26	+/-0.030	54.250	/			
0.050	+/-0.010	.048	/			

Measured by: <i>Dr</i>		Audited by: 38 9-89		Preliminary Approval:	
Date: 15/08/15		Date: 17/08/15		Date:	

Rev	Date	Change	Revised by	Approved
A	09.10.01	New Issue P/O D3849-041	KJ	
B	12.10.26	Dimensions updated per Dwg Rev D	KJ	

0.3 REF

R38.5

49.51

D3849-1 PLATE
(MAKE FROM D3849-1F)

A6-10

51.313

36.000

18.000

2.45

0.050
REF

7.72

Ø0.188 THRU
2 PL

D2-10

R0.38
TYPH
B3-10

A4-6

2.433
TYP6.642
4 PLR0.06
2 PL105°
TYPR0.50
TYP

54.26 REF

49.27

43.51

41.50

40.00

34.00

29.00

23.00

18.69

14.38

10.06

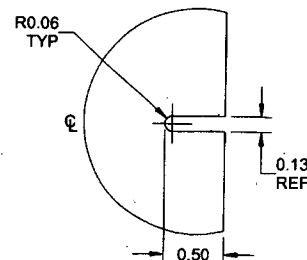
7.00

5.75

RELEASED

2014 NOV 24

SEE COPY
ATTACHED TO
DRAWING
UNCONTROLLED COPY
SUBJECT TO
REVISIONS
NO. 134557 MJS
15-07-10

D3849-1F FLAT PATTERN**DETAIL I**C2-6
B2-9**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240 18 GAUGE 0.050 THICK, (REF. DART SPEC. M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.30 lbs

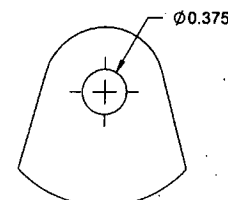
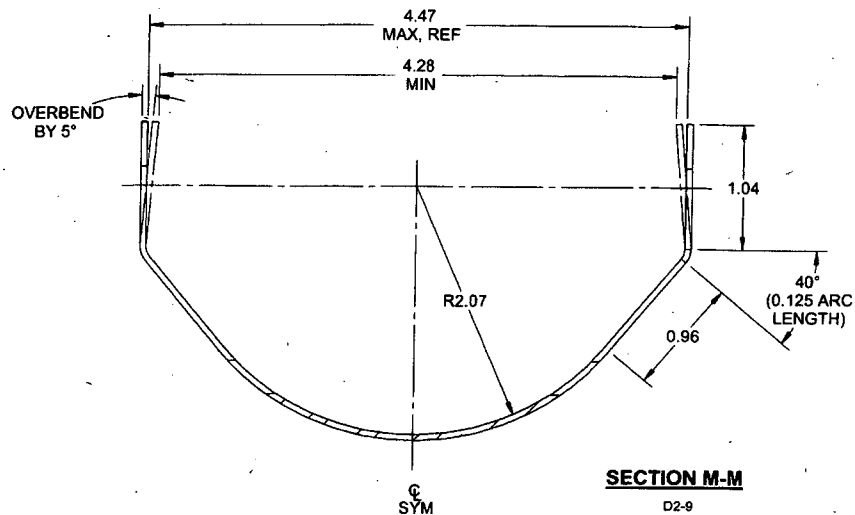
APPROVED

DESIGN	RF
DRAWN	AK
CHECKED	VS
MFG. APPR.	DD
APPROVED	HS
DE APPR.	DS
DATE	14.08.07

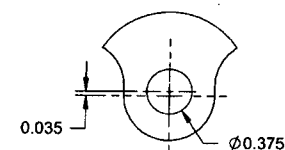
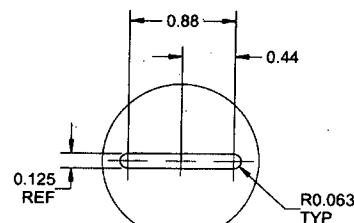
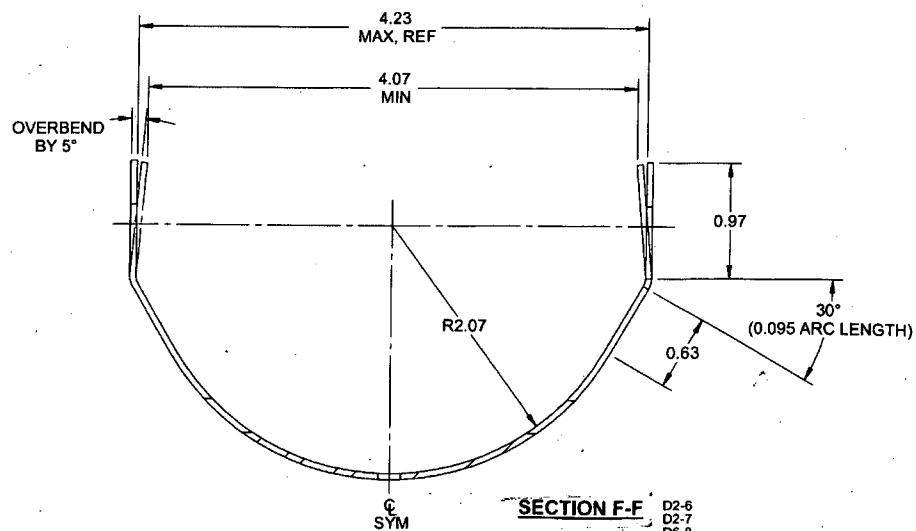
DART AEROSPACE USA, INC.
KENT, WA

DRAWING NO. **D3849** REV. E
SHEET 6 OF 10
TITLE **WEARPLATE ASSY** SCALE NTS

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C4-6
C4-7
C4-8
C6-9



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2014 NOV 24

APPROVED	DESIGN	RF	DART AEROSPACE USA, INC.	
	DRAWN	AK	KENT, WA	
	CHECKED	VS	DRAWING NO.	REV. E
	MFG. APPR.	DD	D3849	SHEET 10 OF 10
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	WEARPLATE ASSY	NTS
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